

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code Firm-Fixed-Price		Page 1 Of 8	
2. Amendment/Modification No. P00006		3. Effective Date 2007APR26		4. Requisition/Purchase Req No. SEE SCHEDULE		5. Project No. (If applicable)	
6. Issued By U.S. ARMY TACOM LCMC AMSTA-AQ-AHLA LINDA BALLARD (586)574-8388 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: BALLARDL@TACOM.ARMY.MIL		Code W56HZV	7. Administered By (If other than Item 6) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608 SCD B PAS NONE ADP PT HQ0339				Code S0512A
8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) MARVIN LAND SYSTEMS, INC. 261 WEST BEACH AVENUE INGLEWOOD, CA 90302-2904 TYPE BUSINESS: Other Small Business Performing in U.S.				<input type="checkbox"/>		9A. Amendment Of Solicitation No.	
				<input type="checkbox"/>		9B. Dated (See Item 11)	
				<input checked="" type="checkbox"/>		10A. Modification Of Contract/Order No. W56HZV-06-C-0387	
				<input type="checkbox"/>		10B. Dated (See Item 13) 2006APR20	
Code 064H2		Facility Code					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. Accounting And Appropriation Data (If required) NO CHANGE TO OBLIGATION DATA							
13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS It Modifies The Contract/Order No. As Described In Item 14.							
KIND MOD CODE: G							
<input type="checkbox"/> A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A.		The Changes Set Forth In Item 14 Are Made In					
<input type="checkbox"/> B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).							
<input checked="" type="checkbox"/> C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of: MUTUAL AGREEMENT OF THE PARTIES							
<input type="checkbox"/> D. Other (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office.							
14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE SECOND PAGE FOR DESCRIPTION							
Contract Expiration Date: 2008NOV30							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. Name And Title Of Signer (Type or print)				16A. Name And Title Of Contracting Officer (Type or print) DENISE MIKA MIKAD@TACOM.ARMY.MIL (586)574-7076			
15B. Contractor/Offeror _____ (Signature of person authorized to sign)		15C. Date Signed		16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		16C. Date Signed 2007APR26	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE				30-105-02		STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243	

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-06-C-0387 MOD/AMD P00006	Page 2 of 8
Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.		

SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of Modification P00006 of Contract W56HZV-06-C-0387 is to add the following to Section C:

"C.3.2.4.2.1.3.3. CONTROL TEST: The Control Test sampling section process of 1 unit per 100 produced will be at the discretion of the Government Program Office."
 2. There is no change in contract price as a result of this modification.
 3. Except as provided herein, all other terms and conditions remain unchanged and in full force and effect.
- *** END OF NARRATIVE A 0007 ***

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 3 of 8
	PIIN/SIIN W56HZV-06-C-0387	MOD/AMD P00006	
Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.			

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

SECTION C

STATEMENT OF WORK

CONTENTS

- C.1 SCOPE
 - C.1.1 BACKGROUND
- C.2 APPLICABLE DOCUMENTS
 - C.2.1 MILITARY SPECIFICATIONS
 - C.2.2 MILITARY STANDARDS
 - C.2.3 OTHER PUBLICATIONS
 - C.2.3.1 GOVERNMENT
 - C.2.3.2 INDUSTRY STANDARD
- C.3 REQUIREMENTS
 - C.3.1 GENERAL
 - C.3.2 DETAIL TASKS
 - C.3.2.1 FABRICATION
 - C.3.2.2 ASSEMBLY
 - C.3.2.3 CONFIGURATION CONTROL
 - C.3.2.4 PRODUCT ASSURANCE
 - C.3.2.4.1 INSPECTION SYSTEM
 - C.3.2.4.2 INSPECTION AND TESTING
 - C.3.2.4.2.1 FIRST ARTICLE TESTING
 - C.3.2.4.2.1.1 UNIT VERIFICATION TESTING
 - C.3.2.4.2.1.2 COMPONENT VIBRATION TESTING
 - C.3.2.4.2.1.3 VEHICLE INSTALLATION AND TESTING
 - C.3.2.4.2.1.3.1 ROAD TESTING
 - C.3.2.4.2.1.3.2 HIGH TEMPERATURE TEST
 - C.3.2.4.2.1.3.3 CONTROL TEST
 - C.3.2.4.2.1.1.1 UNIT VERIFICATION TESTING
 - C.3.2.4.2.1.1.2 COMPONENT VIBRATION TESTING
 - C.3.2.4.2.1.1.3 VEHICLE INSTALLATION AND TESTING
 - C.3.2.4.3 CERTIFICATES OF CONFORMANCE
 - C.3.2.5 PROGRAM MANAGEMENT
 - C.3.2.6 SAFETY
 - C.3.2.7 ENVIRONMENTAL COMPLIANCE
 - C.3.2.8 PACKAGING
 - C.3.2.9 DELIVERY

SECTION C

STATEMENT OF WORK FOR

Multiple Launch Rocket System (MLRS)

Auxiliary Power Unit/Environmental Control Unit (APU/ECU)

C.1. SCOPE

This Statement of Work (SOW) establishes and defines all non-specification requirements for the contractor efforts to fabricate and assemble the required APU/ECU kit components utilizing drawings and performance specification provided by the Government under a firm fixed price contract. The completed APU/ECU kit shall be provided to the Government for retrofit of the MLRS.

C1.1. BACKGROUND

The APU/ECU will provide crew cab cooling and auxiliary electrical power on the M270A1 MLRS vehicle. The product improvement will incorporate environmental control and auxiliary electrical power into the M270A1 vehicle to provide 1) cooling and air re-circulation to the crew cab in order to meet human factors environmental requirements for crew comfort and efficiency and 2) an auxiliary electrical power source to charge vehicle batteries and increase effectiveness during silent watch.

C.2. APPLICABLE DOCUMENTS

C.2.1 MILITARY SPECIFICATIONS

C.2.2 MILITARY STANDARDS AND HANDBOOKS

MIL-HDBK-61A (SE) 07 Feb 01 Configuration Management Guidance

<p>CONTINUATION SHEET</p>	<p>Reference No. of Document Being Continued</p> <p>PIIN/SIIN W56HZV-06-C-0387 MOD/AMD P00006</p>	<p>Page 4 of 8</p>
----------------------------------	---	----------------------------------

Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.

C.2.3 OTHER PUBLICATIONS

C.2.3.1 GOVERNMENT

C.2.3.2 INDUSTRY STANDARD

ISO 9001:2000 Quality Management Systems - Requirements

C.3 REQUIREMENTS

C.3.1 GENERAL

The work required by this contract shall be performed in accordance with this Statement of Work (SOW). The contractor shall provide the Government with MLRS APU/ECU Modification Kit consisting of:

- Evaporator Assembly, PN 12488461
- Condenser Assembly, PN 12488462
- APU Assembly, PN 12488459
- APU Control Box, PN 12488416
- ECU Condenser Cable, MLS PN 306-9642
- APU Power Cable, MLS PN 306-9621
- Evaporator Ground Cable, MLS PN 306-9668

These assemblies and components, which will be collectively referred to throughout this statement of work as the MLS APU/ECU Kit, shall comply with Performance Specification, Auxiliary Power Unit/Environmental Control Unit (APU/ECU) for Multiple Launch Rocket System, 19207-12488429, 18 Apr 2005. The contract is for a quantity of 227 kits. This effort includes the fabrication, assembly, and packaging of the kits.

C.3.2 DETAIL TASKS

C.3.2.1 FABRICATION

The contractor shall fabricate and provide hardware in accordance with the drawings and associated documents which correspond to the above listed Assemblies and components.

C.3.2.2 ASSEMBLY

The contractor shall assemble units in accordance with the assembly drawings and associated documents which correspond to the above listed Assemblies and components.

C.3.2.3 CONFIGURATION CONTROL

C.3.2.3.1 The contractor shall not deliver to the Government hardware that does not meet the performance specification and drawings without the approval of the Government. The contractor shall submit a Request for Deviation (RFD), in accordance with CDRL A001, using MIL-HDBK-61 Paragraph 6.3 as guidance, to the Government when hardware deviates from drawing requirements. (DI-CMAN-80640C)

C.3.2.3.2 AS-BUILT RECORDS

C.3.2.3.2.1 The contractor shall maintain a record of serialized/lot controlled items or components defined in C.3.2.3.2.2. This record shall include serialized/lot controlled configuration items (CIs) and components or parts. Items included in this record are as follows:

- a. Highest Assembly Army Serial Number
- b. Part Number
- c. Part Description
- d. Part Serial Number
- e. Drawing Number
- f. Drawing Revision
- g. Quality Doc Revision
- h. Change Document Number (if applicable)
- i. Change Document Type

C.3.2.3.2.2 The contractor shall establish and maintain an automated record system for complete identification of the as-built hardware for each CI produced under this contract. This record shall contain a file of each Part Number listed below and submitted in accordance with CDRL A002 (DI-CMAN-81553) of this contract. Final documentation shall be noted and easily identifiable.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-06-C-0387 MOD/AMD P00006	Page 5 of 8
Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.		

Part Number	Item
12488459	APU Assembly
12488417	Engine Assembly
12488418	Alternator Assembly
12488416	APU Control Box
MLS P/N 306-9011	ECU Control Box
MLS P/N 306-0052	Compressor
MLS P/N 306-9007	Compressor Motor
MLS P/N 306-9009	Motor Controller
MLS P/N 306-9646	ECU Control Panel
MLS P/N	APU Control Panel

C.3.2.4 PRODUCT ASSURANCE

C.3.2.4.1 INSPECTION SYSTEM

Inspection and Acceptance shall be at Origin. The Contractor must maintain an inspection system comparable to ISO 9001:2000 Quality Management Systems--Requirements. All requirements of this SOW shall be addressed by the Quality System.

C.3.2.4.2 INSPECTION AND TESTING

Required Inspections and Testing shall be performed by the Contractor. These Inspections and Tests shall be performed in accordance with Performance Specification 19207-12488429. Such issues as length of time allowed for testing and disposition of test sample units shall be agreed to prior to commencement of testing. To allow for Government participation, at least twenty days prior to the start of testing, the Contractor shall provide notice to both DCMA and PM Heavy Brigade Combat Team.

The Contractor is allowed to request waiver of First Article Test (FAT). This request is to be submitted in writing. A FAT Summary Report is required and shall be compiled by the Contractor to the Contractor's own format. The Test Report shall document the results of the joint Contractor/Government Verification Inspection, Component Vibration Testing and Vehicle Installation and Testing as related to MLS provided hardware. Discrepancies and corrective actions shall be included in the summary report. The Government shall have 30 days to approve or disapprove the FAT report.

*C.3.2.4.2.1 FIRST ARTICLE TESTING

The contractor shall conduct First Article Testing in accordance with APU/ECU Performance Specification, 19207-12488429, including the following:

FAT samples shall consist of two of the first three MLS APU/ECU Kits produced using production processes, production tooling, production material, production personnel, and production inspection methods. Each of the two kits shall be subjected to and successfully complete the contractor developed/government accepted production Acceptance Test Procedures (ATPs) before proceeding with FAT.

FAT shall consist of: Unit Verification Inspection, Component Vibration Testing, and Vehicle Installation and Testing.

The contractor is authorized to DD250 the First Article Test unit on the vehicle at the test site, without the unit returning to the Contractor's site.

*Changed by Modification P00002

*Changed by Modification P00003

C.3.2.4.2.1.1 UNIT VERIFICATION INSPECTION

At least 20 calendar days prior to submission of the First Article Units for acceptance inspection, you shall notify the Administrative Contracting Officer and Procuring Contracting Officer of the time and location of the inspection so we may witness and participate in the inspection. You shall make available to us any record of inspections and tests which have previously been conducted on the FAT units and their components. The FAT samples will be subjected to a joint contractor and government inspection and verification. This inspection will consist of a review of test and inspection documentation and the conduct of the acceptance test procedures (ATPs).

The inspection and test documentation on one sample shall include actual data taken during dimensional inspection and testing, showing objective evidence that all requirements by their respective drawings and specification have been met. The other sample shall have test and inspection documentation showing objective evidence meeting all drawing and specification requirements. Objective quality evidence shall consist of, but not limited to, contractor and vendor inspection records, vendor certifications, material/special process certifications, and testing records. In addition, the Government will participate (witness) in the final test and acceptance of the two FAT units. The Government reserves the right to repeat any inspections and tests where evidence of verification is not properly documented.

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 6 of 8
	PIIN/SIIN W56HZV-06-C-0387	MOD/AMD P00006	
Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.			

Unless unforeseen circumstances are encountered, FAT Unit Verification Inspection effort shall be limited to one week, including pre and post-meetings.

C.3.2.4.2.1.2 COMPONENT VIBRATION TESTING

Component vibration testing will be conducted on the environmental control unit, both evaporator assembly and condenser assembly, in accordance with Test Plan No. APUECU001, Design Validation (Qualification) Test Plan for Auxiliary Power Unit / Environmental Control Unit For the Multiple Launch Rocket System, 02 February 2006, except that all vibration testing will be performed at ambient temperatures. Vibration profiles shall be in accordance with Laboratory Vibration Test Schedule (LVTS) Development Report for the ECU dated 14 February 2006.

C.3.2.4.2.1.3 VEHICLE INSTALLATION AND TESTING

The second MLS APU/ECU Kit will be provided to the Government for installation onto a MLRS vehicle located at BAE Systems, Santa Clara, CA. After installation, a joint inspection will be conducted with Contractor and Government Representatives to confirm proper installation and fit. Once installation and fit has been confirmed, the installed APU/ECU system will be subjected to the following tests from Performance Specification 19207-12488429:

Performance Spec. Ref. <u>Section 3</u>	Performance Spec. Ref. <u>Section 4</u>	<u>Description</u>	<u>Component Level</u>	<u>System Level Trial</u>
3.1.1.1 a, b, c, d	4.6.2.1	Mission Capabilities		X
3.1.2.1.1	4.6.2.2.1	Re-Circulated Airflow		X
3.1.2.2.1	4.6.2.3.1	Continuous Power Output		X
3.1.2.2.2	4.6.2.3.2	Internal Power Draw		X
3.1.2.2.3	MIL-STD-1275	Power Quality		X
3.1.2.2.4	4.6.2.3.3	Power Compatibility		X
3.1.2.2.5	4.6.2.3.4	Over-voltage, Under-voltage, & Short Circuit Protection		X
3.1.3.1	4.6.3.a	Physical Characteristics		X
3.1.3.5	4.6.3.f	Finish	X	X
3.1.4.3.5 a,c	4.6.4.1	Engine Functional Characteristics		X
3.1.6.5.1	4.6.6	APU Diagnostics		X
3.1.6.5.2	4.6.6	ECU Diagnostics		X
3.1.12	4.6.12	Workmanship	X	X

The contractor will aid in the testing by providing test equipment and support personnel necessary to conduct on-vehicle testing required in the above Matrix, Vehicle Road Testing and High Temperature Testing.

C.3.2.4.2.1.3.1 ROAD TESTING

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-06-C-0387 MOD/AMD P00006	Page 7 of 8
Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.		

The installed APU/ECU system will be subjected to a 25 mile road test under varying terrains and operational scenarios. Upon completion of the road test, additional hours will be accumulated on the ACU/ECU under various conditions until a total of 100 APU/ECU testing hours have been completed.

C.3.2.4.2.1.3.2 HIGH TEMPERATURE TEST

After Road Testing, the installed APU/ECU will be subjected to an environmental chamber high temperature test in accordance with Performance Specification 19207-12488429, paragraph 3.1.7.1.1, Tactical Operation.

After completion of Road and High Temperature Testing, a joint contractor and government team will thoroughly inspect the APU/ECU system for any degradation and non-conformances. In the event of any anomalies in the MLS APU/ECU Kit, the Contractor will perform failure analysis to the extent necessary to determine the root cause. If the failure is the result of not meeting drawings, performance specification or other contract requirements, the Contractor shall take all necessary corrective actions. Additional testing may be performed to confirm corrective actions.

Following completion of FAT requirements, the MLS APU/ECU FAT Kits shall be considered part of the contractual delivery quantity. The kit used for trial installation may remain on the vehicle. All corrective actions applied during testing shall be incorporated into the production line (and FAT units) to ensure that all production APU/ECU Kits meet Drawing and Performance Specification requirements.

In the event of discrepancies, the contractor shall analyze each discrepancy, determine root cause and implement corrective action into the production process. Government review and concurrence for all corrective action is required.

*C.3.2.4.2.1.3.3 CONTROL TEST

The Control Test sampling selection process of 1 unit per 100 produced will be at the discretion of the Government Program Office.

*Added by Modification P00006

C.3.2.4.3 CERTIFICATES OF CONFORMANCE

The contractor shall have available for review certificates of conformance or certified test reports when required by Drawings and Quality Assurance Provisions (QAPs) for all materials and processes. The certificates shall include actual test data or results that show compliance within allowable tolerances, when applicable.

C.3.2.5 PROGRAM MANAGEMENT

The contractor shall maintain a management system to satisfy technical, production, and program requirements and to generate information for required reports. The system used shall provide auditable summarization of internal data generated by the technical, production, and management tracking procedures.

The contractor shall conduct In-Process Reviews on a quarterly basis with the Government. The Government or contractor may request additional meetings between the Government and Contractor to discuss progress and work in process. These meetings shall be held on an as-needed basis at the contractors facilities.

C.3.2.6 SAFETY

The contractor shall comply with all applicable federal, state and local safety requirements of issue on the date of receipt of this Statement of Work.

C.3.2.7 ENVIRONMENTAL COMPLIANCE

The contractor shall comply with all applicable federal, state and local environmental compliance requirements.

C.3.2.8 PACKAGING

Packaging shall be in accordance with Section D (Packing and Marking) and shall consist of Standard Commercial Packaging with individual packing per Top Assembly Part Number.

C.3.2.9 DELIVERY

Deliveries shall be in accordance with the following schedule:

2007

Name of Offeror or Contractor: MARVIN LAND SYSTEMS, INC.

Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3	5	10	14	14	14	14	14	14	10

2008

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
14	14	14	14	14	14	14	14	3

C.3.2.10 PAINT REQUIREMENTS

All exposed, exterior surfaces on the APU, ECU and installation kit items, must painted 686A Tan in accordance with Fed-Std-595 (MIL DTL-64159, Tan 686A, 33446) including those surfaces that are currently required by drawings to be painted 383 green.

Section C Paragraph C.3.2.10 added by Modification P00002

*** END OF NARRATIVE C 0001 ***